10/052,968

IN THE CLAIMS

Please consider the following replacement claim set.

5929015
5415688

1-25. (Canceled)

26. (Previously Presented) A composition in a form of solid particles that is soluble in an aqueous solution for use as a sterilant, comprising:

one or more dipercarboxylic acids that are solid at room temperature and soluble at sterilizing concentrations in water; and

an exothermic control agent, wherein the composition is provided in measured amounts to provide a concentration of the one or more dipercarboxylic acids of at least 0.1 wt. % in a measured amount of water to form a sterilizing aqueous solution, wherein the composition is substantially free from organic compounds other than the one or more dipercarboxylic acids, and wherein the composition is solid particles.

27. (Original) The composition of claim 26, wherein the particles form a powder.

28. (Original) The composition of claim 26, wherein the particles are in colloid form.

29. (Original) The composition of claim 26, wherein the particles are in crystalline form.

30. (Original) The composition of claim 26, wherein the particles are in the form of tablets.

31. (Original) The composition of claim 26, wherein the one or more dipercarboxylic acids are selected from diperglutaric acid, diperadipic acid, diperpimelic acid, dipersuberic acid, dipersebacic acid, diperazelaic acid, and combinations thereof.

32. (Original) The composition of claim 26, wherein the solid particles further comprise stabilizers.

33. (Original) The composition of claim 32, wherein the stabilizers further comprise stannates, dipicolinic acid, pyrophosphoric and polypyrophosphoric acid and their salts.

34. (Original) The composition of claim 32, wherein the stabilizers comprise inorganic salts.

35. (Original) The composition of claim 26, wherein the solid particles are substantially free from organic compounds other than the one or more dipercarboxylic acids.

36. (Original) The composition of claim 26, wherein the one or more dipercarboxylic acids are soluble in water in the absence of a solubilizer.

37. (Original) The composition of claim 34, wherein the inorganic salts are selected from sodium sulfate, magnesium sulfate, hydrated alkali metal salts, alkaline earth metal salts, and combinations thereof.

38-39. (Canceled)

40. (Original) The composition of claim 26, wherein the dipercarboxylic acid has enhanced hydrophobicity of an alkyl chain.

41. (Original) The composition of claim 40, wherein the hydrophobicity is enhanced by incorporation of polar functional groups in a carbon chain.

42. (Original) The composition of claim 41, wherein the polar functional groups are selected from hydroxyl, amino, amido, alkoxy, carbonyl groups or combinations thereof.

43. (Canceled)

44. (Previously Presented) The composition of claim 26, wherein the exothermic control agent is selected from hydrated forms of Na_2SO_4, $MgSO_4$, and combinations thereof.

45. (Previously Presented) The composition of claim 26, wherein the exothermic control agent is selected from hydrated alkali metal salts, hydrated alkaline earth metal salts, and combinations thereof.

46. (Previously Presented) The composition of claim 26, wherein the exothermic control agents are prepared as particles that are distinct from the particles of the one or more dipercarboxylic acids.

47. (Previously Presented) The composition of claim 26, wherein the one or more percarboxylic acid is diperglutaric acid.

48. (Previously Presented) The composition of claim 26, wherein the composition is provided in measured amounts to provide a diperglutaric acid concentration between 0.1 and 2 wt. % in a measured amount of water

49. (Previously Presented) The composition of claim 26, wherein the one or more dipercarboxylic acid includes less than about 0.1 percent by weight of amido or imido peroxyacids.